



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-0164; Project Identifier MCAI-2022-01357-T; Amendment 39-22416; AD 2023-08-01]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model BD-700-1A10 and BD-700-1A11 airplanes. This AD was prompted by a report that certain airplane flight manuals (AFMs) contain figures with incorrect performance charts for landing on contaminated runways. This AD requires revising the existing AFM to correct the affected performance charts. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-0164; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address

for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For service information identified in this final rule, contact Bombardier, Inc., Business Aircraft Customer Response Center, 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-2999; email ac.yul@aero.bombardier.com; Internet bombardier.com.
- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at regulations.gov under Docket No. FAA-2023-0164.

FOR FURTHER INFORMATION CONTACT: Gabriel Kim, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc., Model BD-700-1A10 and BD-700-1A11 airplanes. The NPRM published in the *Federal Register* on February 13, 2023 (88 FR 9215). The NPRM was prompted by AD CF-2022-49, dated August 23, 2022, issued by Transport Canada, which is the aviation authority for Canada (referred to after this as the MCAI). The MCAI states that it was discovered that the thrust reverser correction factors presented in certain AFM performance charts for landing on contaminated runways do not provide sufficient margin for stopping distances in certain conditions. If not corrected, use of the affected performance charts could lead to longitudinal runway excursions. To address the unsafe condition, Transport Canada issued Transport Canada AD CF-2021-35, dated October 26, 2021

(Transport Canada AD CF-2021-35) mandating certain AFM revisions that incorporate changes to the wet and contaminated runway stopping distance data. Transport Canada AD CF-2021-35 corresponds to FAA AD 2022-24-01, Amendment 39-22241 (88 FR 6976, February 2, 2023) (AD 2022-24-01).

Since Transport Canada AD CF-2021-35 was issued, the MCAI states that it was discovered that the mandated AFM changes to Figures 07-35-2 and 07-35-4 are incorrect in certain later revisions of two of the AFMs.

In the NPRM, the FAA proposed to require revising the existing AFM to correct the affected performance charts. The FAA is issuing this AD to address the unsafe condition on these products.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-0164.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on this product. Except for minor editorial changes, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information under 1 CFR Part 51

The FAA reviewed the following service information, which specifies revised AFM corrections to the performance charts for landing on contaminated runways. These documents are distinct since they apply to different airplane models and configurations.

- Figure 07-35-2 and Figure 07-35-4 of paragraph A., Take-off on Wet Grooved or Wet PFC Runways, of Section 6 – Performance, of Supplement 35 – Operation on Wet Grooved or Wet Porous Friction Course Runways, of Chapter 7 – Supplements of Bombardier Global 6000 Airplane Flight Manual - Publication No. CSP 700-1V, Revision 42, dated May 19, 2022. (For obtaining this section of the Bombardier Global 6000 Airplane Flight Manual - Publication No. CSP 700-1V, use Document Identification No. GL 6000 AFM.)

- Figure 07-35-2 and Figure 07-35-4 of paragraph A., Take-off on Wet Grooved or Wet PFC Runways, of Section 6 – Performance, of Supplement 35 – Operation on Wet Grooved or Wet Porous Friction Course Runways, of Chapter 7 – Supplements of Bombardier Global 5000 Featuring Global Vision Flight Deck Airplane Flight Manual - Publication No. CSP 700-5000-1V, Revision 42, dated May 19, 2022. (For obtaining this section of the Bombardier Global 5000 Featuring Global Vision Flight Deck Airplane Flight Manual - Publication No. CSP 700-5000-1V, use Document Identification No. GL 5000 GVFD AFM.)

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 204 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
1 work-hour X \$85 per hour = \$85	\$0	\$85	\$17,340

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2023-08-01 Bombardier, Inc.: Amendment 39-22416; Docket No. FAA-2023-0164; Project Identifier MCAI-2022-01357-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD affects AD 2022-24-01, Amendment 39-22241 (88 FR 6976, February 2, 2023) (AD 2022-24-01).

(c) Applicability

This AD applies to Bombardier, Inc., airplanes identified in paragraphs (c)(1) and (2) of this AD, certificated in any category.

(1) Model BD-700-1A10 airplanes, serial numbers 9381, 9432 through 9860 inclusive, 9863 through 9867 inclusive, 9869 through 9871 inclusive, 9873, 9875 through 9878 inclusive, 60005, 60024, 60030, 60032, 60037, 60043, 60045, 60049, 60056, 60057, 60061, 60068 and 60072.

(2) Model BD-700-1A11 airplanes, serial numbers 9386, 9401, and 9445 through 9997 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight controls.

(e) Unsafe Condition

This AD was prompted by a report that certain airplane flight manuals (AFMs) contain figures with incorrect performance charts for landing on contaminated runways. The FAA is issuing this AD to address incorrect AFM performance charts, which if not corrected, could lead to longitudinal runway excursions.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) AFM Revision

Within 30 days after the effective date of this AD: Do the applicable actions specified in paragraphs (g)(1) and (2) of this AD.

(1) For Model BD-700-1A10 airplanes with a Global 6000 marketing designation: Revise the existing AFM to incorporate the information specified in Figure 07-35-2 and Figure 07-35-4 of paragraph A., Take-off on Wet Grooved or Wet PFC Runways, of Section 6 – Performance, of Supplement 35 – Operation on Wet Grooved or Wet Porous Friction Course Runways, of Chapter 7 – Supplements of Bombardier Global 6000 Airplane Flight Manual - Publication No. CSP 700-1V, Revision 42, dated May 19, 2022.

Note 1 to paragraph (g)(1): For obtaining this section of the Bombardier Global 6000 Airplane Flight Manual - Publication No. CSP 700-1V, use Document Identification No. GL 6000 AFM.

(2) For Model BD-700-1A11 airplanes with a Global 5000 featuring Global Vision Flight Deck (GVFD) marketing designation: Revise the existing AFM to incorporate the information specified in Figure 07-35-2 and Figure 07-35-4 of paragraph A., Take-off on Wet Grooved or Wet PFC Runways, of Section 6 – Performance, of Supplement 35 – Operation on Wet Grooved or Wet Porous Friction Course Runways, of Chapter 7 – Supplements of Bombardier Global

5000 Featuring Global Vision Flight Deck Airplane Flight Manual - Publication No. CSP 700-5000-1V, Revision 42, dated May 19, 2022.

Note 2 to paragraph (g)(2): For obtaining this section of the Bombardier Global 5000 Featuring Global Vision Flight Deck Airplane Flight Manual - Publication No. CSP 700-5000-1V, use Document Identification No. GL 5000 GVFD AFM.

(h) Terminating Action for Certain Requirements of AD 2022-24-01

Accomplishing the AFM revision required by paragraph (g) of this AD terminates the requirement in AD 2022-24-01 to incorporate Figure 07-35-2 and Figure 07-35-4 as part of the procedures specified in paragraphs (g)(3)(viii) and (g)(5)(viii) of AD 2022-24-01.

(i) Additional FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or

Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(j) Additional Information

(1) Refer to Transport Canada AD CF-2022-49, dated August 23, 2022, for related information. This Transport Canada AD may be found in the AD docket at regulations.gov under Docket No. FAA-2023-0164.

(2) For more information about this AD, contact Gabriel Kim, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyacos@faa.gov.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Figure 07-35-2 and Figure 07-35-4 of paragraph A., Take-off on Wet Grooved or Wet PFC Runways, of Section 6 – Performance, of Supplement 35 – Operation on Wet Grooved or Wet Porous Friction Course Runways, of Chapter 7 – Supplements of Bombardier Global 6000 Airplane Flight Manual - Publication No. CSP 700-1V, Revision 42, dated May 19, 2022.

Note 3 to paragraph (k)(2)(i): For obtaining this section of the Bombardier Global 6000 Airplane Flight Manual - Publication No. CSP 700-1V, use Document Identification No. GL 6000 AFM.

(ii) Figure 07-35-2 and Figure 07-35-4 of paragraph A., Take-off on Wet Grooved or Wet PFC Runways, of Section 6 – Performance, of Supplement 35 – Operation on Wet Grooved or Wet Porous Friction Course Runways, of Chapter 7 – Supplements of Bombardier Global 5000

Featuring Global Vision Flight Deck Airplane Flight Manual - Publication No. CSP 700-5000-1V, Revision 42, dated May 19, 2022.

Note 4 to paragraph (k)(2)(ii): For obtaining this section of the Bombardier Global 5000 Featuring Global Vision Flight Deck Airplane Flight Manual - Publication No. CSP 700-5000-1V, use Document Identification No. GL 5000 GVFD AFM.

(3) For service information identified in this AD, contact Bombardier, Inc., Business Aircraft Customer Response Center, 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-2999; email ac.yul@aero.bombardier.com; Internet bombardier.com.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on April 11, 2023.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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